Professor Guerino Mazzola
Fall 2017, HSEM 2047H, Ferg 149: Honors Seminar: *All About Music: Its Meaning, Reality, Communication, and Embodiment*

Course Description
The great philosopher of life Friedrich Nietzsche rightly claims that "without music, life would be a mistake." This does not mean that life is automatically perfect with music. This seminar deals with exactly this problem: What is music doing to us? Why do we listen to it? And how that? What is its meaning in our lives, why does it matter, which realities does it touch, how can it be communicated? In what way is it distributed between intellect and emotions? And why do we go to concerts, since electronic media and the internet provide such an easy access? The answers will be approached via intensive listening to all kinds of music from different cultures and epochs as well as through critical, very open discussions with the studens. The instructor being highly sensitive to non-authoritarian music cultures, he may provide a thoroughly dynamic and flexible acces to music.

Fulfillment of Liberal Education Principles
Theis seminar enables students to envisage values that underlie musical expression, from emotional to embodied or symbolic contents, and to understand the communicative challenge of exchanging such contents in the universal language of organized sound, be it by direct human interplay or using architectures and processes of music technology.

Fulfillment of the Technology and Society Theme
- The course examines one or more technologies that have had some measurable impact on contemporary society.
  We study sound synhesis technologies, such as Fourier, Frequence Modulation (FM) synthesis, wavelets, and physical modeling. We also study the music communication language MIDI. These technologies have a deep inpact on how music is created, transformed, communicated, and reused. These technologies enable a radically new network of musical awareness, locally (ipod, iphone) and globally (internet, itunes, streaming technologies, etc.).
- The course builds student understanding of the science and engineering behind the technology addressed.
  We discuss the scientific background of these technolgies, explaning, for example, what are the mathematical structures enabeling FFT (Fast Fourier Transform) or FM synthesis. We also introduce the data structure that describes the MIDI communication standard for electronic instruments.
- Students discuss the role that society has played in fostering the development of technology as well as the response to the adoption and use of technology.
  In the chapters on semiotics and communication, we discuss the social needs for a musical culture that is omnipresent and always available. The history of MP3 is an excellent example of how society enforced new technologies enabeling internet-based communication. We also discuss the role of performance with respect to advanced technologies, for example in the study of Michael Jackson concerts, as opposed to performance tradition of classical Western concerts.
- Students consider the impact of technology from multiple perspectives that include developers, users/consumers, as well as others in society affected by the technology.
  We discuss the dramatic change of understanding music and of its role in everyday life as it is provided by the devices of the new technolgies. For example, the ipod enables access to any

desired music in all life situations and thereby changes our experience of life and our actions in social contexts significanty. This is also addressed in the chapter about communication.

- Students develop skills in evaluating conflicting views on existing or emerging technology.
  In order to develp such skills, we focus on conservative perspective on musical performance, such as forwarded by conductor Sergiu Celibidache, as opposed to our present unlimited use of music recordings that lack of a traditional environment of a concert hall and thereby disregard the original acoustical setup.
- Students engage in a process of critical evaluation that provides a framework with which to evaluate new technology in the future.
  Using our musical ontology, the students learn to position adequately a problem of evaluating new technology. They learn to observe all dimensions of ontology (realities, semiotics, communication, embodiment) that help identify the critical characteristics of the given problem.

Media and Collaboration

The course is using numerous music examples from CDs, DVDs, and Internet resources. The students will play a crucial role by their participation in core discussions about their understanding of and approach to music. This collaboration will be successful if they know better, why they are interested in music, its philosophy, its overall influence, and its making.

Prerequisites

No special prerequisites except: interest and confidence that this seminar is basic for a future music-sensitive curriculum.

Goals and Objectives, and the Student Learning and Development Outcomes

Our overall target is to set up a gross "topography of music", namely a big body encompassing all aspects and putting them together in a non-conflicting way. The miraculous thing is that this body can be visualized by a four-dimensional cube. Isn't that fascinating?

Student Learning Outcomes: Students

1. Can identify, define, and solve problems
   regarding musical contents, communication media and realities
2. Can locate and critically evaluate information
   relating to the quality of music, the individual position of musical artists and the audience's reception
3. Have mastered a body of knowledge and a mode of inquiry
   by a detailed study of musical examples reaching from classical rehearsal practices to pop or jazz music performances, also investigating personal choices of musical phenomena in the final project
4. Understand diverse philosophies and cultures within and across societies
   by a cross-cultural study of musical cultures, from symbolic approaches to emotional expressivity in past and present cultures from the Middle Ages to present times
5. Can communicate effectively
   about musical works bejond the simple appreciative or depreciative utterances, also to be learned for the first assignment of a critical text regarding the creatin of musical contents by famous conductors

6. Understand the role of creativity, innovation, discovery, and expression across disciplines studying the role of music technology and music theories for the breakdown of walls of conceptual boxes, where musical standards are defined
7. Have acquired skills for effective citizenship and life-long learning
   by means of an extended listening experience where the students learn to open up spaces where new processes and perspectives can unfold, and thereby enabeling them to become real listeners and not only scanning automata driven by unreflected prejudices.

Student Development Outcomes: Students demonstrate

1. Responsibility and Accountability by making appropriate decisions on behavior and accepting the consequences of their actions
   while musical utterances are communicated with implicitly critical contents
2. Independence and Interdependence by knowing when to collaborate or seek help and when to act on their own
   in the collaborative reality of music making and the associated exchange of gestural instances
3. Goal Orientation by managing their energy and attention to achieve specific outcomes
   especially while they develop their final presenation that must focus on a specific theme and be presented in 15 minutes in front of the class
4. Self-Awareness by knowing their personal strengths and talents and acknowledging their shortcomings,
   a test which the students will make during the whole course within a large amount of in-class discussions, which are very important for the final grading
5. Resilience by recovering and learning from setbacks or disappointments,
   also a process that will be practiced in in-class discussions where the students learn that making errors is the most natural situation in any progressive environment of the arts, sciences, and life in general
6. Appreciation of Differences by recognizing the value of interacting with individuals with backgrounds and/or perspectives different from their own,
   a competence which will be crucial to be learned while confronting different individual tastes of musical expression
7. Tolerance of Ambiguity by demonstrating the ability to perform in complicated environments where clear cut answers or standard operating procedures are absent,
   yes, this is characteristic in musical environments where the contents are extremely complex and pertain to what in the theory of signs (semiotics) is called connotational layering.

Grading

I grade on a scale 0-10 with 0.1 steps: 9.5-10 = A, 9-9.4 = A-, 8.5-8.9 = B+, 7.6-8.4 = B, 7-7.5 = B-, 6.5-6.9 = C; 6-6.4 = C-, 5-5.9 = D, 0-4.9 = F.
Final grade: Class participation 1/2, one class paper 1/4, one oral presentation 1/4, no final exam.
Plagiarism will not be tolerated and will lead to failure.

The course is for three credits.

Contact

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Schedule of Classes

As a rule of thumb, each chapter part XX.yy will take us one week of the semester.

I **Introduction**

Summary of Chapter

We present the concept of onotology of music and the overall plan, namely to go through and verify the statement that

Music embodies meaningful communication
and mediates physially between its
emotional and symbolic layers.

II **The Dimension of Realities**

Summary of Chapter

We start from the physical reality: acustics, present the most prominent sound synthesis methods: Fourier, Frequency Modulation, Wavelets, and Physical Modeling. We then discuss the emotional reality in music, core theories, and musical aspects of psychopathologies, such as depression and schizophrenia. We conclude with a discussion of the symbolic reality of music, especially with the space of different tunings (Pythagorean, just, tempered).

II.1 Physical Reality
II.2 Psychological Reality
II.3 Mental Realiy

III **The Dimension of Meaning**

Summary of Chapter

The question of meaning in and of music is discussed, starting from the Saussurean model of semiotic systems, including Saussure's famous dichotomies, all being illustrated by musically important examples, such as, for example, the dichotomy motivated/arbitrary which is illustrated in the opposition of analogue/digital music media (LP vs. CD). The deictic position of conductor Celibidache is shown in a video, ***and the students have to write their first paper on this position****. We conclude with an explicit model of musical connotation from abstract score signs to performed and perceived emotional contents.*

III.1 Expressions of Music
III.2 Musical Contents
III.3 Mechanisms of Musical Signification

IV **The Dimension of Communication**

Summary of Chapter

Communication, as modeled by Molino, Valery, and Nattiez, is presented in its triple structure from poiesis to neutral level to aesthesis. The role of the poetial ego in the communicative process is discussed and exemplified for different artists, reaching from Michael Jackson to François Villon, Franz Schubert, Miles Davis. We conclude with a presentation of the MIDI sound format, a core communication device in electronically supported music production. This topic is illustrated by a number of MIDI-supported musical works, created using music composition computer software.

IV.1 Poietics: The Creative
IV.2 Neutral Level: The Work
IV.3 Aesthesis: The Receptive Position

V **The Dimension of Embodiment**

Summary of Chapter

This chapter is about the role of the embodiment of music, be it with the instruments, the human body, or gestural shaping of musical dimensions. We illustrate this perspective with artistic works that are strongly defined via embodiment and gestures, such as Jackson Pollock, or Cecil Taylor. We conclude the chapter with a discussion (illustrated by significant videos) of robots in music.

V.1 Musical Facticity
V.2 Processes Behind the Facts
V.3 The Gestural Stratum of the Making

The second assignment to the students is an oral presentation of 15 minutes about a preferred musical subject, to show how the students have digested the theoretical concepts of this course.

VI **Synopsis**

References

Mazzola, G et al: All About Music. Springer, Heidelberg 2016